

10/516476

DT05 Rec'd PCT/PTO 30 NOV 2004

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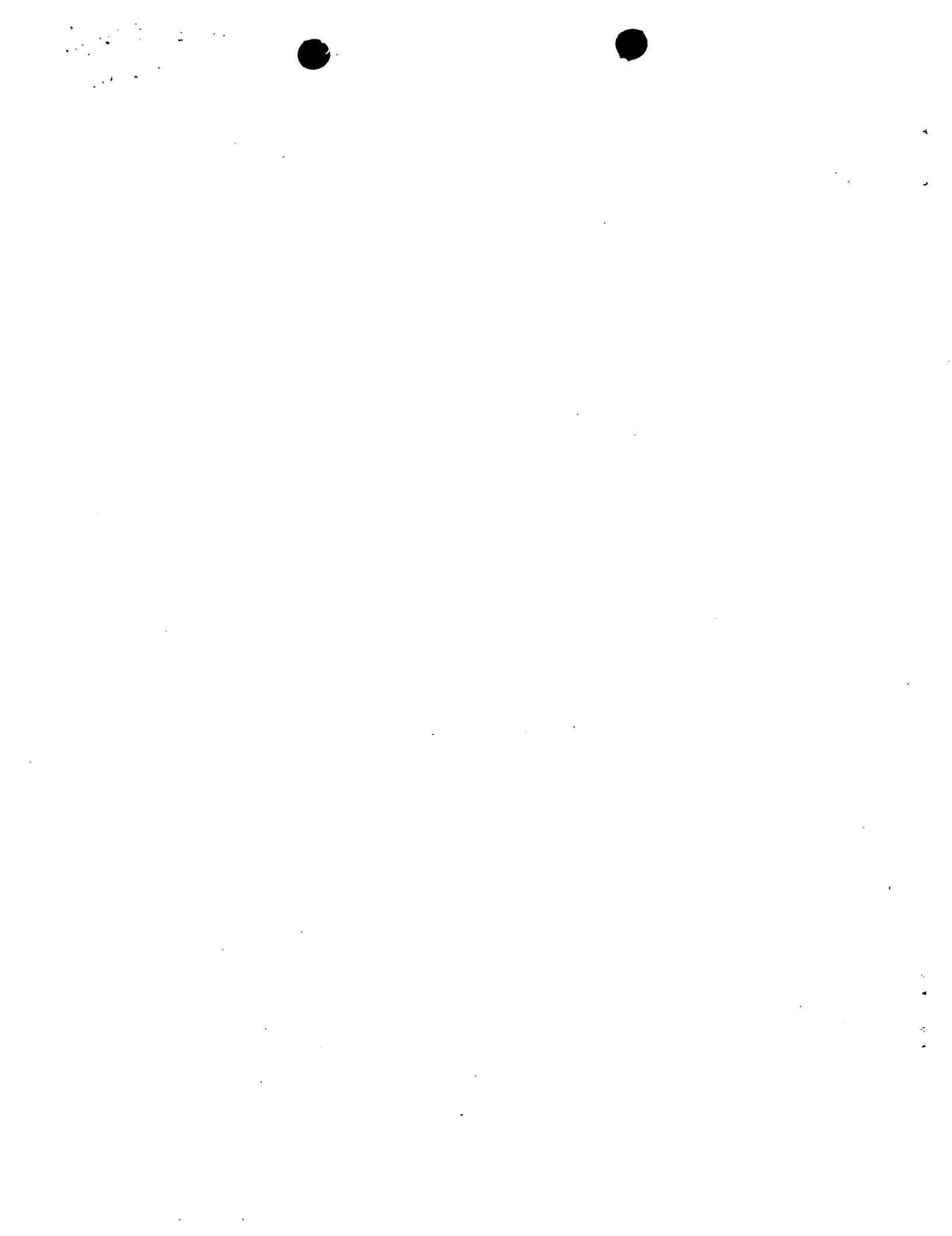
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Date: Dec 11, 2003

Recipient: IB

Address: Bureau international de l'OMPI 34, chemin des Colombettes Geneve 20 1211 CH



10/516476

D Rec'd PCT/PTO 30 NOV 2004
PCT/US03/17559

WO 03/101400

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<212> PRT
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Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val
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Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly
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Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu
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Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val
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Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg
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Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val
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Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn
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Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg
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Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu

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Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe		
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Leu Leu Glu Asp Thr Trp Thr Phe Met Lys Ala Arg Leu Asn Cys		
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Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala		
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Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn		
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Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu		
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Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val		
385	390	395
400		
Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu		
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Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr		
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Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser		
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Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro		
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Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg		
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Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp		
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Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu		
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Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro		
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Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys
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Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp
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Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Gly
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Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro Val
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Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly
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Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro
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Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser
850 855 860

Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr Arg Ser
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Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu
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Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly Phe
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Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu Gly Ser
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Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro Asn Phe Val

370	375	380
Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu Arg Glu Asn 385 390 395 400		
Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg Val Ala Arg 405 410 415		
Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu Asp Thr Trp 420 425 430		
Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro Gly Glu Val 435 440 445		
Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu Pro Glu Gln 450 455 460		
Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser Ile Ala Ala 465 470 475 480		
Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln Ala Phe Asn 485 490 495		
Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp Leu Pro Ile 500 505 510		
Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro Glu Thr Gly 515 520 525		
Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala Gln Arg Leu 530 535 540		
Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu Pro Cys Val 545 550 555 560		
Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp Leu Val Gln 565 570 575		
Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr Glu Ser Gly 580 585 590		
Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu His Gly Cys 595 600 605		
Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg Glu Pro Leu 610 615 620		
Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu 625 630 635 640		
Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg 645 650 655		
Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp 660 665 670		
Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser 675 680 685		
Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg 690 695 700		

Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu
 705 710 715 720

Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp
 725 730 735

Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile
 740 745 750

His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val Ile
 755 760 765

Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe Gln Val Arg
 770 775 780

Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly Arg Ile Cys
 785 790 795 800

Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys
 805 810 815

Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser
 820 825 830

Ser Asn Cys Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn
 835 840 845

Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro
 850 855 860

Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu
 865 870 875 880

Pro Val Asn Val Thr Gln Gly Ala Arg Gln Glu Gln Arg Phe Arg
 885 890 895

Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly
 900 905 910

Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser
 915 920 925

Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr
 930 935 940

Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser
 945 950 955 960

Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr
 965 970 975

Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp
 980 985 990

Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly
 995 1000 1005

Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys
 1010 1015 1020

Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala
 1025 1030 1035

Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 1040 1045 1050

Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1055 1060 1065

Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1070 1075 1080

Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1085 1090 1095

Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1100 1105 1110

Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1115 1120 1125

Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1130 1135 1140

Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1145 1150 1155

Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1160 1165 1170

Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1175 1180 1185

Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1190 1195 1200

Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1205 1210 1215

Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1220 1225 1230

Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1235 1240 1245

<210> 23
<211> 1150
<212> PRT
<213> Homo sapiens

<400> 23
Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
20 25 30

Leu His Pro Pro Leu Gly Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala
35 40 45

Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro Leu Ala Val
50 55 60

Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His Leu Ser Ser
65 70 75 80

Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala
85 90 95

Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln Pro Trp Val
100 105 110

Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu
115 120 125

Asp Pro Ser Gly Asn Gln Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe
130 135 140

Arg Leu Ser Leu Ala Asn Val Ser Leu Leu Gln Ala Thr Glu Trp Ala
145 150 155 160

Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu
165 170 175

Glu Glu Cys Gln Asn Tyr Val Arg Val Leu Ile Val Ala Gly Arg Lys
180 185 190

Val Phe Met Cys Gly Thr Asn Ala Phe Ser Pro Met Cys Thr Ser Arg
195 200 205

Gln Val Gly Asn Leu Ser Arg Thr Thr Glu Lys Ile Asn Gly Val Ala
210 215 220

Arg Cys Pro Tyr Asp Pro Arg His Asn Ser Thr Ala Val Ile Ser Ser
225 230 235 240

Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile Asp Phe Ser Gly Arg Asp
245 250 255

Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala
260 265 270

Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr
275 280 285

Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu
290 295 300

His Asp Cys Gly Arg Thr Val Tyr Ser Arg Val Ala Arg Val Cys Lys
305 310 315 320

Asn Asp Val Gly Gly Arg Phe Leu Leu Glu Asp Thr Trp Thr Thr Phe
325 330 335

Met Lys Ala Arg Leu Asn Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr
340 345 350

Tyr Asn Glu Leu Gln Ser Ala Phe His Leu Pro Glu Gln Asp Leu Ile
355 360 365

Tyr Gly Val Phe Thr Thr Asn Val Asn Ser Ile Ala Ala Ser Ala Val
370 375 380

Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe
385 390 395 400

Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro
405 410 415

Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu
420 425 430

Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala Gln Arg Leu Phe Leu Met
435 440 445

Ser Glu Ala Val Gln Pro Val Thr Pro Glu Pro Cys Val Thr Gln Asp
450 455 460

Ser Val Arg Phe Ser His Leu Val Val Asp Leu Val Gln Ala Lys Asp
465 470 475 480

Thr Leu Tyr His Val Leu Tyr Ile Gly Thr Glu Ser Gly Thr Ile Leu
485 490 495

Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu His Gly Cys Tyr Leu Glu
500 505 510

Glu Leu His Val Leu Pro Pro Gly Arg Arg Glu Pro Leu Arg Ser Leu
515 520 525

Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu Arg Asp Gly
530 535 540

Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly
545 550 555 560

Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln
565 570 575

Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser Leu Trp Thr
580 585 590

Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg Asp Gly Gly
595 600 605

Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu Asp Gly Asp
610 615 620

Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg
625 630 635 640

Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile His Ile Ala
645 650 655

Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val His Arg Gly Pro
660 665 670

Leu Cys Ser His Val Leu Trp His Ala Ala Ser Arg Ser Ala Ser Glu
675 680 685

Val Ala Ala Thr Leu Leu Pro Ala Thr Gly Ala Ala Ser Ala Trp Ala

690	695	700
Arg Ala Trp Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys Pro Val		
705	710	715
Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn		
725	730	735
Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn		
740	745	750
Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro Glu Gly		
755	760	765
Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu Pro Val		
770	775	780
Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr		
785	790	795
800		
Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly Arg Arg		
805	810	815
Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp		
820	825	830
Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr Ser Pro		
835	840	845
His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys		
850	855	860
Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr Cys Thr		
865	870	875
880		
Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp Ala Ala		
885	890	895
Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly Ala Trp		
900	905	910
Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly		
915	920	925
His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly		
930	935	940
Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu Ala Leu Cys Ala Thr		
945	950	955
960		
Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp Ser Glu Trp Ser Lys Cys		
965	970	975
Thr Asp Asp Gly Ala Gln Ser Arg Ser Arg His Cys Glu Glu Leu Leu		
980	985	990
Pro Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg Pro Cys		
995	1000	1005
Pro Tyr Ser Glu Ile Arg Val Ile Leu Pro Ala Ser Ser Met Glu		
1010	1015	1020

Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
 1025 1030 1035
 Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
 1040 1045 1050
 Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
 1055 1060 1065
 Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
 1070 1075 1080
 Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys
 1085 1090 1095
 Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp Asp Arg Ala Asn Phe
 1100 1105 1110
 Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr Thr Thr Tyr Tyr Pro
 1115 1120 1125
 Ser Pro Leu Asn Lys His Ser Phe Arg Pro Glu Ala Ser Pro Gly
 1130 1135 1140
 Gln Arg Cys Phe Pro Asn Ser
 1145 1150

<210> 24
 <211> 1211
 <212> PRT
 <213> Homo sapiens

<400> 24
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15
 Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30
 Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45
 Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60
 Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80
 Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
 85 90 95
 Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
 100 105 110
 Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
 115 120 125
 Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
 130 135 140

Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
145 150 155 160

Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp
165 170 175

Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly
180 185 190

Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu
195 200 205

Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln
210 215 220

Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu
225 230 235 240

Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser
245 250 255

Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu
260 265 270

Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser
275 280 285

Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile
290 295 300

Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly
305 310 315 320

Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro
325 330 335

Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu
340 345 350

Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg
355 360 365

Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu
370 375 380

Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro
385 390 395 400

Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu
405 410 415

Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser
420 425 430

Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln
435 440 445

Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp
450 455 460

Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro
465 470 475 480

Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala
485 490 495

Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu
500 505 510

Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp
515 520 525

Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr
530 535 540

Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu
545 550 555 560

His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg
565 570 575

Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe
580 585 590

Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala
595 600 605

Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys
610 615 620

Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser
625 630 635 640

Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn
645 650 655

Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
660 665 670

Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
675 680 685

Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
690 695 700

Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
705 710 715 720

Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
725 730 735

Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
740 745 750

Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
755 760 765

Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
770 775 780

Lys Cys Ser Ser Asn Cys Gly Gly Met Gln Ser Arg Arg Arg Ala

785	790	795	800
Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr			
805	810	815	
Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr			
820	825	830	
Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln			
835	840	845	
Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu			
850	855	860	
Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly			
865	870	875	880
Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser			
885	890	895	
Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly			
900	905	910	
Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg			
915	920	925	
Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys			
930	935	940	
Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro			
945	950	955	960
Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala			
965	970	975	
Ser Cys Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro			
980	985	990	
Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu			
995	1000	1005	
Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp			
1010	1015	1020	
Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser			
1025	1030	1035	
Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly			
1040	1045	1050	
Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val			
1055	1060	1065	
Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly			
1070	1075	1080	
Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu			
1085	1090	1095	
Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His			
1100	1105	1110	

Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125

Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140

Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155

Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170

Ala Ser Ala Gly Tyr Pro Pro Leu Pro Gly Ser Leu Tyr Ser Thr
 1175 1180 1185

Gln Gly Ile Pro Leu Val Arg Gly Ser Glu Tyr Trp Glu Leu Glu
 1190 1195 1200

Ala Asp Leu Cys Leu Glu Val Leu
 1205 1210

<210> 25
 <211> 1203
 <212> PRT
 <213> Homo sapiens

<400> 25

Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30

Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45

Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60

Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80

Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
 85 90 95

Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
 100 105 110

Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
 115 120 125

Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
 130 135 140

Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
 145 150 155 160

Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp

165

170

175

Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly
 180 185 190

Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu
 195 200 205

Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln
 210 215 220

Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu
 225 230 235 240

Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser
 245 250 255

Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu
 260 265 270

Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser
 275 280 285

Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile
 290 295 300

Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly
 305 310 315 320

Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro
 325 330 335

Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu
 340 345 350

Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg
 355 360 365

Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu
 370 375 380

Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro
 385 390 395 400

Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu
 405 410 415

Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser
 420 425 430

Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln
 435 440 445

Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp
 450 455 460

Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro
 465 470 475 480

Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala
 485 490 495

Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu
 500 505 510

Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp
 515 520 525

Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr
 530 535 540

Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu
 545 550 555 560

His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg
 565 570 575

Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe
 580 585 590

Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala
 595 600 605

Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys
 610 615 620

Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser
 625 630 635 640

Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn
 645 650 655

Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
 660 665 670

Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685

Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700

Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720

Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735

Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750

Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765

Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780

Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800

Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815

Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830

Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845

Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860

Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880

Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895

Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910

Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925

Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940

Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960

Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975

Ser Cys Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990

Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005

Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020

Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035

Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050

Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065

Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080

Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095

Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110

Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125

Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu

1130	1135	1140
Lys Tyr Thr Pro Met Glu Phe Lys	Thr Leu Asn Lys	Asn Asn Leu
1145	1150	1155
Ile Pro Asp Asp Arg Ala Asn Phe	Tyr Pro Leu Gln Gln	Thr Asn
1160	1165	1170
Val Tyr Thr Thr Tyr Tyr Pro Ser Pro	Leu Asn Lys His Ser	
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Phe Arg Pro Glu Ala Ser Pro Gly	Gln Arg Cys Phe Pro	Asn Ser
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Val Ser Trp Met Pro Cys Gly Phe Ser	Pro Ser Pro Val Ala His His		
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Leu Val Pro Gly Pro Pro Asp Thr Pro	Ala Gln Gln Leu Arg Cys Gly		
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Trp Thr Val Gly Gly Trp Leu Leu Ser	Leu Val Arg Gly Arg Lys Pro		
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Ser Gly Asp Phe Glu Trp Arg Gln Gly	Trp Arg Gly Pro Gly Glu Glu		
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Asp Trp Pro Glu Ser Pro Ser Pro	Lys Val Leu Met Asp Ser Ala Gly		
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Gly Leu Leu Pro Cys Leu Pro Pro Gly	Ala Arg Thr Ala Glu Gly Pro		
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Ile Met Val Leu Ala Gly Pro Leu Ala	Val Ser Leu Leu Leu Pro Ser		
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Leu Thr Leu Leu Val Ser His Leu Ser	Ser Ser Gln Asp Val Ser Ser		
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Glu Pro Ser Ser Glu Gln Gln Leu Cys	Ala Leu Ser Lys His Pro Thr		
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Val Ala Phe Glu Asp Leu Gln Pro Trp	Val Ser Asn Phe Thr Tyr Pro		
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Gly Ala Arg Asp Phe Ser Gln Leu Ala.	Leu Asp Pro Ser Gly Asn Gln		

210

215

220

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Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr
 260 265 270

Val Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr
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Asn Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser
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Arg Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro
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Arg His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala
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Ala Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser
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Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp
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Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala
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Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr
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Val Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg
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Phe Leu Leu Glu Asp Thr Trp Thr Phe Met Lys Ala Arg Leu Asn
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Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser
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Ala Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr
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Asn Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser
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Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro
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Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys
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Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser
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<213> Homo sapiens

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<210> 34
<211> 1095
<212> PRT
<213> Homo sapiens

<400> 34
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Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val
35 40 45

Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly
50 55 60

Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu
65 70 75 80

Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val
85 90 95

Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg
100 105 110

Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val
115 120 125

Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn
130 135 140

Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg
145 150 155 160

Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg
165 170 175

His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala
180 185 190

Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu
195 200 205

Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu
210 215 220

Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr
225 230 235 240

Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val
245 250 255

Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe
260 265 270

Leu Leu Glu Asp Thr Trp Thr Phe Met Lys Ala Arg Leu Asn Cys
275 280 285

Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala
290 295 300

Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn
305 310 315 320

Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala
325 330 335

Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg
340 345 350

Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly
355 360 365

Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu
370 375 380

Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val
385 390 395 400

Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu
405 410 415

Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr
420 425 430

Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser
435 440 445

Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro
450 455 460

Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg
465 470 475 480

Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu
485 490 495

Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp
500 505 510

Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu
515 520 525

Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro
530 535 540

Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp
545 550 555 560

Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys
565 570 575

Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp
580 585 590

Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Gly
595 600 605

Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro Val
610 615 620

Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro
625 630 635 640

Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe
645 650 655

Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp
660 665 670

Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Met Gln Ser
675 680 685

Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val
690 695 700

Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn

705	710	715	720
Thr Pro Trp Thr Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala			
725	730	735	
Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp			
740	745	750	
Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys			
755	760	765	
Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val			
770	775	780	
Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp			
785	790	795	800
Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly			
805	810	815	
Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly			
820	825	830	
Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro			
835	840	845	
Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser			
850	855	860	
Pro Cys Ser Ala Ser Cys Gly Gly His Tyr Gln Arg Thr Arg Ser			
865	870	875	880
Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu			
885	890	895	
His Thr Glu Glu Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp			
900	905	910	
Ser Pro Trp Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser			
915	920	925	
Arg Ser Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala			
930	935	940	
Gly Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val			
945	950	955	960
Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly Phe			
965	970	975	
Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu Gly Ser			
980	985	990	
Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His Cys Gln Arg			
995	1000	1005	
Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr Pro Asn His			
1010	1015	1020	
Leu His Tyr Lys Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr			
1025	1030	1035	

Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp
1040 1045 1050

Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr
1055 1060 1065

Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser Phe Arg Pro
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Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
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<210> 35

<211> 1248

<212> PRT

<213> Homo sapiens

<400> 35

Arg Pro Pro His Ser Gln Thr Gly Arg Gln Pro Ile Trp Leu Ala Pro
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Cys Thr Arg Leu Trp Glu Pro Ala Trp Val Arg Val Ala Leu Gly Pro
35 40 45

Ala Arg Ala Val Val Gly Ala Ser Gly Leu Gln Arg Arg Trp Gly Pro
50 55 60

Gly Thr Gln Ala Trp Arg Arg Arg Thr Ser Glu Ala Glu Gly Arg
65 70 75 80

Arg Asp Arg Val Ser Gly Ser Ser Trp Cys Leu Ala Cys Val Ser Trp
85 90 95

Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His Leu Val Pro
100 105 110

Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly Trp Thr Val
115 120 125

Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro Cys Leu Pro
130 135 140

Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu Ala Gly Pro
145 150 155 160

Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu Val Ser His
165 170 175

Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser Glu Gln Gln
180 185 190

Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu Asp Leu Gln
195 200 205

Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp Phe Ser Gln
210 215 220

Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly Ala Arg Asn
225 230 235 240

Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu Gln Ala Thr
245 250 255

Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln Ser Lys Gly
260 265 270

Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu Ile Val Ala
275 280 285

Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser Pro Met Cys
290 295 300

Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu Lys Ile Asn
305 310 315 320

Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser Thr Ala Val
325 330 335

Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile Asp Phe Ser
340 345 350

Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly Pro Pro Leu
355 360 365

Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro Asn Phe Val
370 375 380

Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu Arg Glu Asn
385 390 395 400

Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg Val Ala Arg
405 410 415

Val Cys Lys Asn Asp Val Gly Arg Phe Leu Leu Glu Asp Thr Trp
420 425 430

Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro Gly Glu Val
435 440 445

Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu Pro Glu Gln
450 455 460

Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser Ile Ala Ala
465 470 475 480

Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln Ala Phe Asn
485 490 495

Gly Pro Phe Arg Tyr Gin Glu Asn Pro Arg Ala Ala Trp Leu Pro Ile
500 505 510

Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro Glu Thr Gly
515 520 525

Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala Gln Arg Leu
530 535 540

Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu Pro Cys Val
 545 550 555 560
 Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp Leu Val Gln
 565 570 575
 Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr Glu Ser Gly
 580 585 590
 Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu His Gly Cys
 595 600 605
 Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg Glu Pro Leu
 610 615 620
 Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu
 625 630 635 640
 Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg
 645 650 655
 Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp
 660 665 670
 Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser
 675 680 685
 Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg
 690 695 700
 Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu
 705 710 715 720
 Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp
 725 730 735
 Ser Pro Arg Pro Arg Cys Gly Leu Asp Cys Leu Gly Pro Ala Ile
 740 745 750
 His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val Ile
 755 760 765
 Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe Gln Val Arg
 770 775 780
 Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly Arg Ile Cys
 785 790 795 800
 Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys
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 Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser
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 Ser Asn Cys Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn
 835 840 845
 Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro
 850 855 860
 Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu

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Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg			
885	890	895	
Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly			
900	905	910	
Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser			
915	920	925	
Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr			
930	935	940	
Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser			
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Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr			
965	970	975	
Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp			
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995	1000	1005	
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1010	1015	1020	
Gly Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala			
1025	1030	1035	
Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu			
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Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp			
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Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser			
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Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly			
1085	1090	1095	
Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val			
1100	1105	1110	
Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly			
1115	1120	1125	
Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu			
1130	1135	1140	
Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His			
1145	1150	1155	
Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr			
1160	1165	1170	
Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu			
1175	1180	1185	

Lys	Tyr	Thr	Pro	Met	Glu	Phe	Lys	Thr	Leu	Asn	Lys	Asn	Asn	Leu
1190					1195						1200			
Ile	Pro	Asp	Asp	Arg	Ala	Asn	Phe	Tyr	Pro	Leu	Gln	Gln	Thr	Asn
1205						1210					1215			
Val	Tyr	Thr	Thr	Thr	Tyr	Tyr	Pro	Ser	Pro	Leu	Asn	Lys	His	Ser
1220						1225					1230			
Phe	Arg	Pro	Glu	Ala	Ser	Pro	Gly	Gln	Arg	Cys	Phe	Pro	Asn	Ser
1235						1240					1245			

<210> 36
<211> 1150
<212> PRT
<213> Homo sapiens

<400> 36																
Ala	Ala	Ala	Pro	Phe	Pro	Asp	Arg	Pro	Pro	Ala	His	Leu	Val	Ser	Ser	
1				5						10			15			
Arg	Arg	Ser	Ala	Pro	Pro	Gly	Ser	Arg	Glu	Pro	Arg	Gly	Thr	Gly	His	
								20	25			30				
Leu	His	Pro	Pro	Leu	Gly	Gly	Leu	Leu	Pro	Cys	Leu	Pro	Pro	Gly	Ala	
				35			40				45					
Arg	Thr	Ala	Glu	Gly	Pro	Ile	Met	Val	Leu	Ala	Gly	Pro	Leu	Ala	Val	
					50		55			60						
Ser	Leu	Leu	Leu	Pro	Ser	Leu	Thr	Leu	Leu	Val	Ser	His	Leu	Ser	Ser	
					65		70			75			80			
Ser	Gln	Asp	Val	Ser	Ser	Glu	Pro	Ser	Ser	Glu	Gln	Gln	Leu	Cys	Ala	
					85			90				95				
Leu	Ser	Lys	His	Pro	Thr	Val	Ala	Phe	Glu	Asp	Leu	Gln	Pro	Trp	Val	
					100			105			110					
Ser	Asn	Phe	Thr	Tyr	Pro	Gly	Ala	Arg	Asp	Phe	Ser	Gln	Leu	Ala	Leu	
					115		120			125						
Asp	Pro	Ser	Gly	Asn	Gln	Leu	Ile	Val	Gly	Ala	Arg	Asn	Tyr	Leu	Phe	
					130		135			140						
Arg	Leu	Ser	Leu	Ala	Asn	Val	Ser	Leu	Leu	Gln	Ala	Thr	Glu	Trp	Ala	
					145		150			155			160			
Ser	Ser	Glu	Asp	Thr	Arg	Arg	Ser	Cys	Gln	Ser	Lys	Gly	Lys	Thr	Glu	
					165			170			175					
Glu	Glu	Cys	Gln	Asn	Tyr	Val	Arg	Val	Leu	Ile	Val	Ala	Gly	Arg	Lys	
					180			185			190					
Val	Phe	Met	Cys	Gly	Thr	Asn	Ala	Phe	Ser	Pro	Met	Cys	Thr	Ser	Arg	
					195			200			205					
Gln	Val	Gly	Asn	Leu	Ser	Arg	Thr	Thr.	Glu	Lys	Ile	Asn	Gly	Val	Ala	

210	215	220
Arg Cys Pro Tyr Asp Pro Arg His Asn Ser Thr Ala Val Ile Ser Ser		
225	230	235
Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile Asp Phe Ser Gly Arg Asp		
245	250	255
Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala		
260	265	270
Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr		
275	280	285
Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu		
290	295	300
His Asp Cys Gly Arg Thr Val Tyr Ser Arg Val Ala Arg Val Cys Lys		
305	310	315
Asn Asp Val Gly Gly Arg Phe Leu Leu Glu Asp Thr Trp Thr Phe		
325	330	335
Met Lys Ala Arg Leu Asn Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr		
340	345	350
Tyr Asn Glu Leu Gln Ser Ala Phe His Leu Pro Glu Gln Asp Leu Ile		
355	360	365
Tyr Gly Val Phe Thr Thr Asn Val Asn Ser Ile Ala Ala Ser Ala Val		
370	375	380
Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe		
385	390	395
Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro		
405	410	415
Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu		
420	425	430
Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala Gln Arg Leu Phe Leu Met		
435	440	445
Ser Glu Ala Val Gln Pro Val Thr Pro Glu Pro Cys Val Thr Gln Asp		
450	455	460
Ser Val Arg Phe Ser His Leu Val Val Asp Leu Val Gln Ala Lys Asp		
465	470	475
Thr Leu Tyr His Val Leu Tyr Ile Gly Thr Glu Ser Gly Thr Ile Leu		
485	490	495
Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu His Gly Cys Tyr Leu Glu		
500	505	510
Glu Leu His Val Leu Pro Pro Gly Arg Arg Glu Pro Leu Arg Ser Leu		
515	520	525
Arg Ile Leu His Ser Ala Arg Ala Leu Phe Val Gly Leu Arg Asp Gly		
530	535	540

Val Leu Arg Val Pro Leu Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly
545 550 555 560

Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln
565 570 575

Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser Asn Met Ser Leu Trp Thr
580 585 590

Gln Asn Ile Thr Ala Cys Pro Val Arg Asn Val Thr Arg Asp Gly Gly
595 600 605

Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys Glu His Leu Asp Gly Asp
610 615 620

Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg
625 630 635 640

Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly Pro Ala Ile His Ile Ala
645 650 655

Asn Cys Ser Arg Asn Gly Ala Val Asp Pro Val Val His Arg Gly Pro
660 665 670

Leu Cys Ser His Val Leu Trp His Ala Ala Ser Arg Ser Ala Ser Glu
675 680 685

Val Ala Ala Thr Leu Leu Pro Ala Thr Gly Ala Ala Ser Ala Trp Ala
690 695 700

Arg Ala Trp Glu Glu Arg Phe Cys Asn Glu Asn Thr Pro Cys Pro Val
705 710 715 720

Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn
725 730 735

Cys Gly Gly Met Gln Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn
740 745 750

Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr Cys Asn Pro Glu Gly
755 760 765

Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr Pro Trp Leu Pro Val
770 775 780

Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr
785 790 795 800

Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu Gln Phe Gly Arg Arg
805 810 815

Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp
820 825 830

Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser Gly Ser Thr Ser Pro
835 840 845

His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys
850 855 860

Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg Lys Arg Thr Cys Thr
 865 870 875 880
 Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys Val Gly Asp Ala Ala
 885 890 895
 Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro Val Arg Gly Ala Trp
 900 905 910
 Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly
 915 920 925
 His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly
 930 935 940
 Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu Ala Leu Cys Ala Thr
 945 950 955 960
 Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp Ser Glu Trp Ser Lys Cys
 965 970 975
 Thr Asp Asp Gly Ala Gln Ser Arg Ser Arg His Cys Glu Glu Leu Leu
 980 985 990
 Pro Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg Pro Cys
 995 1000 1005
 Pro Tyr Ser Glu Ile Arg Val Ile Leu Pro Ala Ser Ser Met Glu
 1010 1015 1020
 Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
 1025 1030 1035
 Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
 1040 1045 1050
 Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
 1055 1060 1065
 Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
 1070 1075 1080
 Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys
 1085 1090 1095
 Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp Asp Arg Ala Asn Phe
 1100 1105 1110
 Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr Thr Thr Tyr Tyr Pro
 1115 1120 1125
 Ser Pro Leu Asn Lys His Ser Phe Arg Pro Glu Ala Ser Pro Gly
 1130 1135 1140
 Gln Arg Cys Phe Pro Asn Ser
 1145 1150

<210> 37
 <211> 1211
 <212> PRT

<213> Homo sapiens

<400> 37

Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser			
1	5	10	15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His		
20	25	30

Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys		
35	40	45

Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His		
50	55	60

Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly			
65	70	75	80

Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro		
85	90	95

Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu		
100	105	110

Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu		
115	120	125

Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser		
130	135	140

Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu			
145	150	155	160

Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp		
165	170	175

Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly		
180	185	190

Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu		
195	200	205

Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln		
210	215	220

Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu			
225	230	235	240

Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser		
245	250	255

Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu		
260	265	270

Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser		
275	280	285

Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile		
290	295	300

Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly

305	310	315	320
Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro			
325	330	335	
Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu			
340	345	350	
Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg			
355	360	365	
Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu			
370	375	380	
Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro			
385	390	395	400
Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu			
405	410	415	
Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser			
420	425	430	
Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln			
435	440	445	
Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp			
450	455	460	
Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro			
465	470	475	480
Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala			
485	490	495	
Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu			
500	505	510	
Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp			
515	520	525	
Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr			
530	535	540	
Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu			
545	550	555	560
His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg			
565	570	575	
Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe			
580	585	590	
Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala			
595	600	605	
Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys			
610	615	620	
Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser			
625	630	635	640

Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn
 645 650 655
 Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys
 660 665 670
 Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685
 Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700
 Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720
 Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735
 Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750
 Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765
 Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780
 Lys Cys Ser Ser Asn Cys Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800
 Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815
 Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830
 Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845
 Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860
 Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880
 Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895
 Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910
 Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925
 Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940
 Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960

Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975
 Ser Cys Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990
 Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005
 Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020
 Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035
 Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050
 Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065
 Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080
 Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095
 Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110
 Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125
 Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140
 Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155
 Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170
 Ala Ser Ala Gly Tyr Pro Pro Leu Pro Gly Ser Leu Tyr Ser Thr
 1175 1180 1185
 Gln Gly Ile Pro Leu Val Arg Gly Ser Glu Tyr Trp Glu Leu Glu
 1190 1195 1200
 Ala Asp Leu Cys Leu Glu Val Leu
 1205 1210

<210> 38
 <211> 1203
 <212> PRT
 <213> Homo sapiens

<400> 38
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gly His
 20 25 30

Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45

Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60

Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80

Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro
 85 90 95

Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val Leu
 100 105 110

Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr Leu Leu
 115 120 125

Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu Pro Ser Ser
 130 135 140

Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr Val Ala Phe Glu
 145 150 155 160

Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro Gly Ala Arg Asp
 165 170 175

Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln Leu Ile Val Gly
 180 185 190

Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn Val Ser Leu Leu
 195 200 205

Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg Arg Ser Cys Gln
 210 215 220

Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr Val Arg Val Leu
 225 230 235 240

Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr Asn Ala Phe Ser
 245 250 255

Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser Arg Thr Thr Glu
 260 265 270

Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro Arg His Asn Ser
 275 280 285

Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala Ala Thr Val Ile
 290 295 300

Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser Leu Gly Ser Gly
 305 310 315 320

Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp Leu Asn Glu Pro
 325 330 335

Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala Tyr Phe Phe Leu

340	345	350
Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr Val Tyr Ser Arg		
355	360	365
Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg Phe Leu Leu Glu		
370	375	380
Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn Cys Ser Arg Pro		
385	390	395
Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser Ala Phe His Leu		
405	410	415
Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr Asn Val Asn Ser		
420	425	430
Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser Ala Ile Ser Gln		
435	440	445
Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro Arg Ala Ala Trp		
450	455	460
Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys Gly Thr Leu Pro		
465	470	475
480		
Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser Leu Gln Asp Ala		
485	490	495
Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro Val Thr Pro Glu		
500	505	510
Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His Leu Val Val Asp		
515	520	525
Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu Tyr Ile Gly Thr		
530	535	540
Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala Ser Arg Ser Leu		
545	550	555
560		
His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro Pro Gly Arg Arg		
565	570	575
Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala Arg Ala Leu Phe		
580	585	590
Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu Glu Arg Cys Ala		
595	600	605
Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg Asp Pro Tyr Cys		
610	615	620
Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu Glu Asp Ser Ser		
625	630	635
640		
Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys Pro Val Arg Asn		
645	650	655
Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro Trp Gln Pro Cys		
660	665	670

Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu Cys Arg Ala Arg
 675 680 685

Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu Asp Cys Leu Gly
 690 695 700

Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly Ala Val Asp Pro
 705 710 715 720

Val Val Ile Val Gly Arg Cys Ala Ala Thr Ser Cys Gly Ile Gly Phe
 725 730 735

Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala Pro Arg His Gly Gly
 740 745 750

Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg Phe Cys Asn Glu Asn
 755 760 765

Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser Trp Gly Ser Trp Ser
 770 775 780

Lys Cys Ser Ser Asn Cys Gly Gly Gly Met Gln Ser Arg Arg Arg Ala
 785 790 795 800

Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly Val Glu Phe Lys Thr
 805 810 815

Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg Asn Thr Pro Trp Thr
 820 825 830

Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly Ala Arg Gln Glu Gln
 835 840 845

Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala Asp Pro His Gly Leu
 850 855 860

Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr Cys Pro Ala Asp Gly
 865 870 875 880

Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu Val Leu Leu Arg Ser
 885 890 895

Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly Trp Ala Ala Trp Gly
 900 905 910

Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu Gly Phe Arg Val Arg
 915 920 925

Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn Gly Gly Leu Pro Cys
 930 935 940

Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn Pro Gln Ala Cys Pro
 945 950 955 960

Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp Ser Pro Cys Ser Ala
 965 970 975

Ser Cys Gly Gly His Tyr Gln Arg Thr Arg Ser Cys Thr Ser Pro
 980 985 990

Ala Pro Ser Pro Gly Glu Asp Ile Cys Leu Gly Leu His Thr Glu Glu
 995 1000 1005

Ala Leu Cys Ala Thr Gln Ala Cys Pro Glu Gly Trp Ser Pro Trp
 1010 1015 1020

Ser Glu Trp Ser Lys Cys Thr Asp Asp Gly Ala Gln Ser Arg Ser
 1025 1030 1035

Arg His Cys Glu Glu Leu Leu Pro Gly Ser Ser Ala Cys Ala Gly
 1040 1045 1050

Asn Ser Ser Gln Ser Arg Pro Cys Pro Tyr Ser Glu Ile Arg Val
 1055 1060 1065

Ile Leu Pro Ala Ser Ser Met Glu Glu Ala Thr Asp Cys Ala Gly
 1070 1075 1080

Phe Asn Leu Ile His Leu Val Ala Thr Gly Ile Ser Cys Phe Leu
 1085 1090 1095

Gly Ser Gly Leu Leu Thr Leu Ala Val Tyr Leu Ser Cys Gln His
 1100 1105 1110

Cys Gln Arg Gln Ser Gln Glu Ser Thr Leu Val His Pro Ala Thr
 1115 1120 1125

Pro Asn His Leu His Tyr Lys Gly Gly Gly Thr Pro Lys Asn Glu
 1130 1135 1140

Lys Tyr Thr Pro Met Glu Phe Lys Thr Leu Asn Lys Asn Asn Leu
 1145 1150 1155

Ile Pro Asp Asp Arg Ala Asn Phe Tyr Pro Leu Gln Gln Thr Asn
 1160 1165 1170

Val Tyr Thr Thr Thr Tyr Tyr Pro Ser Pro Leu Asn Lys His Ser
 1175 1180 1185

Phe Arg Pro Glu Ala Ser Pro Gly Gln Arg Cys Phe Pro Asn Ser
 1190 1195 1200

<210> 39
 <211> 1240
 <212> PRT
 <213> Homo sapiens

<400> 39
 Ala Ala Ala Pro Phe Pro Asp Arg Pro Pro Ala His Leu Val Ser Ser
 1 5 10 15

Arg Arg Ser Ala Pro Pro Gly Ser Arg Glu Pro Arg Gly Thr Gl His
 20 25 30

Leu His Pro Pro Leu Gly Val Ser Gly Ser Ser Trp Cys Leu Ala Cys
 35 40 45

Val Ser Trp Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His
 50 55 60

Leu Val Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly
 65 70 75 80

Trp Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Arg Lys Pro
 85 90 95

Ser Gly Asp Phe Glu Trp Arg Gln Gly Trp Arg Gly Pro Gly Glu Glu
 100 105 110

Asp Trp Pro Glu Ser Pro Ser Pro Lys Val Leu Met Asp Ser Ala Gly
 115 120 125

Gly Leu Leu Pro Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro
 130 135 140

Ile Met Val Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser
 145 150 155 160

Leu Thr Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser
 165 170 175

Glu Pro Ser Ser Glu Gln Gln Leu Cys Ala Leu Ser Lys His Pro Thr
 180 185 190

Val Ala Phe Glu Asp Leu Gln Pro Trp Val Ser Asn Phe Thr Tyr Pro
 195 200 205

Gly Ala Arg Asp Phe Ser Gln Leu Ala Leu Asp Pro Ser Gly Asn Gln
 210 215 220

Leu Ile Val Gly Ala Arg Asn Tyr Leu Phe Arg Leu Ser Leu Ala Asn
 225 230 235 240

Val Ser Leu Leu Gln Ala Thr Glu Trp Ala Ser Ser Glu Asp Thr Arg
 245 250 255

Arg Ser Cys Gln Ser Lys Gly Lys Thr Glu Glu Glu Cys Gln Asn Tyr
 260 265 270

Val Arg Val Leu Ile Val Ala Gly Arg Lys Val Phe Met Cys Gly Thr
 275 280 285

Asn Ala Phe Ser Pro Met Cys Thr Ser Arg Gln Val Gly Asn Leu Ser
 290 295 300

Arg Thr Thr Glu Lys Ile Asn Gly Val Ala Arg Cys Pro Tyr Asp Pro
 305 310 315 320

Arg His Asn Ser Thr Ala Val Ile Ser Ser Gln Gly Glu Leu Tyr Ala
 325 330 335

Ala Thr Val Ile Asp Phe Ser Gly Arg Asp Pro Ala Ile Tyr Arg Ser
 340 345 350

Leu Gly Ser Gly Pro Pro Leu Arg Thr Ala Gln Tyr Asn Ser Lys Trp
 355 360 365

Leu Asn Glu Pro Asn Phe Val Ala Ala Tyr Asp Ile Gly Leu Phe Ala
 370 375 380

Tyr Phe Phe Leu Arg Glu Asn Ala Val Glu His Asp Cys Gly Arg Thr

385	390	395	400
Val Tyr Ser Arg Val Ala Arg Val Cys Lys Asn Asp Val Gly Gly Arg			
405	410	415	
Phe Leu Leu Glu Asp Thr Trp Thr Thr Phe Met Lys Ala Arg Leu Asn			
420	425	430	
Cys Ser Arg Pro Gly Glu Val Pro Phe Tyr Tyr Asn Glu Leu Gln Ser			
435	440	445	
Ala Phe His Leu Pro Glu Gln Asp Leu Ile Tyr Gly Val Phe Thr Thr			
450	455	460	
Asn Val Asn Ser Ile Ala Ala Ser Ala Val Cys Ala Phe Asn Leu Ser			
465	470	475	480
Ala Ile Ser Gln Ala Phe Asn Gly Pro Phe Arg Tyr Gln Glu Asn Pro			
485	490	495	
Arg Ala Ala Trp Leu Pro Ile Ala Asn Pro Ile Pro Asn Phe Gln Cys			
500	505	510	
Gly Thr Leu Pro Glu Thr Gly Pro Asn Glu Asn Leu Thr Glu Arg Ser			
515	520	525	
Leu Gln Asp Ala Gln Arg Leu Phe Leu Met Ser Glu Ala Val Gln Pro			
530	535	540	
Val Thr Pro Glu Pro Cys Val Thr Gln Asp Ser Val Arg Phe Ser His			
545	550	555	560
Leu Val Val Asp Leu Val Gln Ala Lys Asp Thr Leu Tyr His Val Leu			
565	570	575	
Tyr Ile Gly Thr Glu Ser Gly Thr Ile Leu Lys Ala Leu Ser Thr Ala			
580	585	590	
Ser Arg Ser Leu His Gly Cys Tyr Leu Glu Glu Leu His Val Leu Pro			
595	600	605	
Pro Gly Arg Arg Glu Pro Leu Arg Ser Leu Arg Ile Leu His Ser Ala			
610	615	620	
Arg Ala Leu Phe Val Gly Leu Arg Asp Gly Val Leu Arg Val Pro Leu			
625	630	635	640
Glu Arg Cys Ala Ala Tyr Arg Ser Gln Gly Ala Cys Leu Gly Ala Arg			
645	650	655	
Asp Pro Tyr Cys Gly Trp Asp Gly Lys Gln Gln Arg Cys Ser Thr Leu			
660	665	670	
Glu Asp Ser Ser Asn Met Ser Leu Trp Thr Gln Asn Ile Thr Ala Cys			
675	680	685	
Pro Val Arg Asn Val Thr Arg Asp Gly Gly Phe Gly Pro Trp Ser Pro			
690	695	700	
Trp Gln Pro Cys Glu His Leu Asp Gly Asp Asn Ser Gly Ser Cys Leu			
705	710	715	720

Cys Arg Ala Arg Ser Cys Asp Ser Pro Arg Pro Arg Cys Gly Gly Leu
725 730 735

Asp Cys Leu Gly Pro Ala Ile His Ile Ala Asn Cys Ser Arg Asn Gly
740 745 750

Gly Arg Gly Pro Arg Gly Ala Ser Trp Ala Ala Val Gln Ala Arg Pro
755 760 765

Val Ala Ser Gly Phe Gln Val Arg Gln Arg Ser Cys Ser Asn Pro Ala
770 775 780

Pro Arg His Gly Gly Arg Ile Cys Val Gly Lys Ser Arg Glu Glu Arg
785 790 795 800

Phe Cys Asn Glu Asn Thr Pro Cys Pro Val Pro Ile Phe Trp Ala Ser
805 810 815

Trp Gly Ser Trp Ser Lys Cys Ser Ser Asn Cys Gly Gly Met Gln
820 825 830

Ser Arg Arg Arg Ala Cys Glu Asn Gly Asn Ser Cys Leu Gly Cys Gly
835 840 845

Val Glu Phe Lys Thr Cys Asn Pro Glu Gly Cys Pro Glu Val Arg Arg
850 855 860

Asn Thr Pro Trp Thr Pro Trp Leu Pro Val Asn Val Thr Gln Gly Gly
865 870 875 880

Ala Arg Gln Glu Gln Arg Phe Arg Phe Thr Cys Arg Ala Pro Leu Ala
885 890 895

Asp Pro His Gly Leu Gln Phe Gly Arg Arg Arg Thr Glu Thr Arg Thr
900 905 910

Cys Pro Ala Asp Gly Ser Gly Ser Cys Asp Thr Asp Ala Leu Val Glu
915 920 925

Val Leu Leu Arg Ser Gly Ser Thr Ser Pro His Thr Val Ser Gly Gly
930 935 940

Trp Ala Ala Trp Gly Pro Trp Ser Ser Cys Ser Arg Asp Cys Glu Leu
945 950 955 960

Gly Phe Arg Val Arg Lys Arg Thr Cys Thr Asn Pro Glu Pro Arg Asn
965 970 975

Gly Gly Leu Pro Cys Val Gly Asp Ala Ala Glu Tyr Gln Asp Cys Asn
980 985 990

Pro Gln Ala Cys Pro Val Arg Gly Ala Trp Ser Cys Trp Thr Ser Trp
995 1000 1005

Ser Pro Cys Ser Ala Ser Cys Gly Gly Gly His Tyr Gln Arg Thr
1010 1015 1020

Arg Ser Cys Thr Ser Pro Ala Pro Ser Pro Gly Glu Asp Ile Cys
1025 1030 1035

Leu Gly Leu His Thr Glu Glu Ala Leu Cys Ala Thr Gln Ala Cys
1040 1045 1050

Pro Glu Gly Trp Ser Pro Trp Ser Glu Trp Ser Lys Cys Thr Asp
1055 1060 1065

Asp Gly Ala Gln Ser Arg Ser Arg His Cys Glu Glu Leu Leu Pro
1070 1075 1080

Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg Pro Cys
1085 1090 1095

Pro Tyr Ser Glu Ile Arg Val Ile Leu Pro Ala Ser Ser Met Glu
1100 1105 1110

Glu Ala Thr Asp Cys Ala Gly Phe Asn Leu Ile His Leu Val Ala
1115 1120 1125

Thr Gly Ile Ser Cys Phe Leu Gly Ser Gly Leu Leu Thr Leu Ala
1130 1135 1140

Val Tyr Leu Ser Cys Gln His Cys Gln Arg Gln Ser Gln Glu Ser
1145 1150 1155

Thr Leu Val His Pro Ala Thr Pro Asn His Leu His Tyr Lys Gly
1160 1165 1170

Gly Gly Thr Pro Lys Asn Glu Lys Tyr Thr Pro Met Glu Phe Lys
1175 1180 1185

Thr Leu Asn Lys Asn Asn Leu Ile Pro Asp Asp Arg Ala Asn Phe
1190 1195 1200

Tyr Pro Leu Gln Gln Thr Asn Val Tyr Thr Thr Thr Tyr Tyr Pro
1205 1210 1215

Ser Pro Leu Asn Lys His Ser Phe Arg Pro Glu Ala Ser Pro Gly
1220 1225 1230

Gln Arg Cys Phe Pro Asn Ser
1235 1240

